BLM sage thinner improves big game habitat Bill Papich, BLM Farmington District Office

CROW MESA – A tractor drags sections of metal pipe with fins welded to the pipe, across areas of dense sagebrush. Some plants are ripped out while others remain, as a container on the tractor releases seeds of grasses and forbs.

The sage thinning tool is called a Dixie Harrow and the area being thinned is Crow Mesa, near Lybrook, on Bureau of Land Management land approximately 30 miles southeast of Bloomfield. The fields of dense sage are next to stands of pinon and juniper trees.

"The Dixie Harrow allows us to easily create a vegetative mosaic, leaving cover for wildlife, interspersed with areas of forage," said BLM wildlife biologist John Hansen. "We remove brush and deposit seed all at the same time."

The project started last year and is a joint effort of the BLM and the New Mexico Department of Game and Fish. By the end of this fall the goal is to have thinned and seeded 2,000 acres on Crow Mesa. Next year the BLM plans to use the Dixie Harrow on another 1,000 acres on Crow Mesa, and in 2010 for thinning and seeding 1,800 acres on Ensenada Mesa east of Largo Canyon. The BLM is also planning Dixie Harrow projects on Delgadito Mesa south of Gobernador, on Manzanares Mesa south of Navajo Lake and near Tank Mountain north of Aztec.

Hansen said the projects are in areas of thick sagebrush where there is a lack of plants growing under the sagebrush – grasses and forbs, that if they were there, would be beneficial to deer and elk in the spring when the animals give birth.

"We do not currently have sufficient early spring forage in these areas that would provide the deer and elk the high protein feed they need at that time of the year," Hansen said.

"Because this is when they're giving birth to their young and it is most important in terms of increasing milk production for lactating females. So our goal with the Dixie Harrow is to introduce those plant species that will provide deer and elk with the early season high protein feed."

Sometimes the tractor gets bogged down in loose, sandy soil, but the interruptions are due more to the Dixie Harrow's 2,500-pound weight and the drag caused when it's pulled across the ground. The Dixie Harrow consists of seven pipes made of thick steel, each pipe 4.5-inches in diameter and each seven feet long – pulled long-ways to the tractor as if the tractor were dragging a giant leaf rake. The array of eight-inch long steel fins welded on each pipe make mince meat out of the ground as 40-50 percent of sagebrush plants are removed.

Hansen said the BLM is spending about \$80,000 on the Crow Mesa project, all of it Sikes Act money – the \$5 fee hunters pay for a stamp on their New Mexico hunting license authorizing them to hunt on public lands in New Mexico. He said the New Mexico Department of Game and Fish is furnishing the seed and paying some of the tractor's fuel costs.



A Dixie Harrow thins sagebrush on BLM land on Crow Mesa while a seed broadcaster on the back of the tractor spreads seeds that will produce grasses and forbs for deer and elk.